PLATELET-DERIVED GROWTH FACTOR RECEPTORS

DNA sequences encoding human platelet-derived growth factor receptors (hPDGF-R), and expression constructs comprising sequences which encode a receptor that can be secreted or incorporated into the membrane of a mammalian cell. Peptide fragments with functions equivalent to the wild-type receptor, conferring a PDGF-sensitive mitogenic response on cells lacking the receptor are provided. The constructs can be used for enhancing PDGF response of cells, determining the regions involved in transducing the signal in response to PDGF binding, providing mutated analogs and evaluating drugs for their physiologic activity. Soluble fragments comprising PDGF receptor sequences are also provided, including important intracellular kinase insert sequences which interact with intracellular proteins.

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